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EXAMINER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Art Unit: 1796

**Attachment to Advisory Action****Response to Arguments**

1. Applicant's arguments filed 3/23/2009, with respect to the data in table 1 in paragraph 5A of office action mailed 12/22/2008 has been fully considered and persuasive.

Applicant argued that mechanical stability for CE7 should be "good" and not "poor" as indicated in the table prepared by examiner.

Examiner regrets the error in indicating that mechanical stability, for comparative example CE7 in Enomoto's Declaration submitted on 10/1/2008, is "good" while it was reported as "poor". Accordingly, it is noted that the mechanical stability for CE7 should be "good" and the corrected table is presented below for the record -

Component	IE1	IE2	IE5	IE6	IE8	CE4	CE5	CE6	CE7
FA	150 g	150 g	150 g	150 g	150 g	150 g	150 g	150 g	150 g
Vinyl Chloride	40 g	40 g	40 g	40 g	40 g	40 g	40 g	40 g	40 g
Non-ionic emulsifier	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Epoxidized soybean oil	10 g	10 g	10 g	10 g	10 g	10 g	10 g	10.7 g	0 g
Sodium hydrogen carbonate / Sodium Carbonate	0.7 g	0.7 g	1.5 g	0.7 g	0.9 g	0.7 g	0.7 g	0 g	10.7 g
H <sub>2</sub> O repellency (Initial)	5	5	5	5	4	5	5	5	4
Oil repellency (Initial)	5	4	4	4	3	5	5	5	3
H <sub>2</sub> O repellency (1 month at 50°C)	5	5	5	5	4	4	4	4	4
Oil repellency (1 month at 50°C)	4	4	4	4	3	3	3	3	3
Storage stability	Good	Good	Good	Good	Good	Good	Good	Good	Good
Mechanical Stability	Good	Good	Good	Good	Good	Fair	Fair	Fair	Poor
Chemical Stability	Good	Good	Good	Good	Fair	Fair	Fair	Fair	Poor
Yellowing	Good	Good	Good	Good	Good	Good	Good	Good	Good

2. Applicant's arguments filed 3/23/2009 have been fully considered but they are not persuasive. Specifically, applicant argues that (A) examples according to the present

Art Unit: 1796

invention (IE1, IE2, IE5, IE6 and IE8) have much better mechanical stability and chemical stability than the comparative examples (CE4, CE5, CE6 and CE7) outside the scope of present invention; (B) IE1, IE2, IE5 and IE6 exhibited much better H<sub>2</sub>O repellency after 1 month at 50<sup>0</sup>C than CE4, CE5, CE6 and CE7; and (C) inventive examples 1-10 are representative of present invention and thus commensurate with scope of present claims. The key feature of the claimed subject matter does not reside in the monomers (i), (ii) and (iii) but rather in the combination of (a) epoxidized vegetable oil and/or epoxidized fatty acid ester with (b) the weakly basic compounds

With respect to (A), as can be seen from the data in table presented above, inventive example IE8 has similar chemical stability as the comparative example CE4, CE5 and CE6, while exhibiting only a slightly better chemical stability than comparative example CE7.

With respect to (B), applicant's attention is drawn to IE8 (inventive example) which exhibits similar oil and water repellency (after 1 month at 50<sup>0</sup>C) as that of comparative examples CE4, CE5, CE6 and CE7. In fact, comparative examples CE4, CE5 and CE6 exhibit better initial oil and water repellency than IE8.

With respect to (C), as stated earlier, only data in the declaration that is given weight is that of examples that are conducted in a side-by-side manner (i.e. inventive examples IE1, IE2, IE5, IE6, IE8 and comparative examples CE4, CE5, CE6, CE7). Given that the combination traps HCl from the chlorine containing monomer, it is the examiner's position that monomers used in the invention play a key role. Thus, while examples showing supposedly superior properties are presented only for one chlorine-containing polymerizable compound (i.e. vinyl chloride), one polymerizable compound having a perfluoroalkyl (average of  $n = 8$ , based on mixture of compounds wherein  $n = 6$ ,

Art Unit: 1796

8, 10, 12 and 14) or perfluoroalkenyl group and one methacrylate group containing monomer in both inventive and comparative examples, present claims are directed to a broad genus for perfluoroalkyl or perfluoroalkenyl group containing monomer, chlorine-containing monomer and methacrylate group containing monomer. Furthermore, only weakly basic compound used in the examples include sodium hydrogen carbonate and sodium carbonate, with epoxidized soybean oil as the only epoxidized vegetable oil.

Therefore, the showing of alleged superior properties is not commensurate with scope of present claims.

/K. P. R./

Examiner, Art Unit 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796